Name:_____

CC2, Class 5, ElShakhs

Weekly Math Homework Packet 02-11 to 02-19

Please have this homework sheet out next to your homework at the beginning of the period.

Homework Effort Score				Assign Date	Due Date	Section	Classwork	Homework
100%	75%	50%	Missing					
				Tues 2/11	Wed 2/12	5.3.2	5-104 to 5-108	5-96, 98, 99 5-109,
				Wed 2/12	Fri 2/14	5.3.3	SBAC Performance Task 5-155 to 5-118	5-123 to 5-127
				Fri 2/14	Weds 2/19	5.3.4	5-128 to 5-131	5-139 to 5-142

Remember – Homework help available at www.cpm.org

- **Tuesday Homework:**
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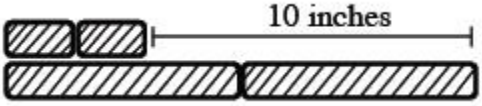
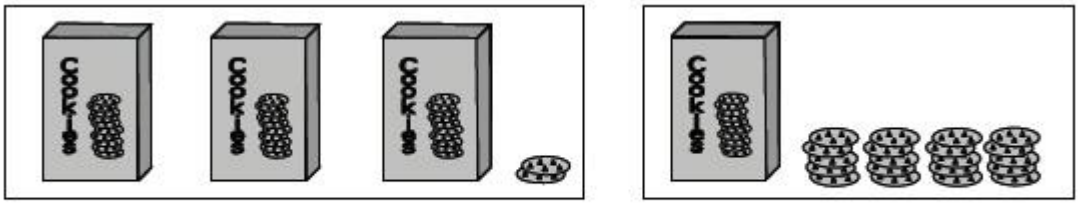
- **5-96.** Examine the pictures below. Then use words to describe the relationship you see in the pictures. Assume the lengths that appear to be equal are equal.

a. 

b. 

c. 

METHODS AND MEANINGS

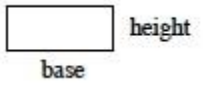
MATH NOTES

Solving Problems with the 5-D Process

The **5-D Process** is an organized method to solve problems. The D's stand for Describe/Draw, Define, Do, Decide, and Declare. An example of this work is shown below.

Problem: The base of a rectangle is 13 centimeters longer than the height. If the perimeter is 58 centimeters, find the base and the height of the rectangle.

Describe/Draw: The shape is a rectangle and we are looking at the perimeter.



	Define		Do	Decide
	Height (trial)	Base (height + 13)	Perimeter 2(base) + 2(height)	58?
Trial 1:	10	10 + 13 = 23		66 is too high
Trial 2:	7	7 + 13 = 20	2(20) + 2(7) = 54	too low
Trial 3:	8	8 + 13 = 21	2(21) + 2(8) = 58	correct

Use a trial value.

Use the relationships stated in the problem to determine the values of the other quantities (such as base and perimeter).

Decide if the answer is correct. Revise and make another trial until you find the correct answer.

Declare: The base is 21 centimeters and the height is 8 centimeters.

5-98. Represent this description with a picture.

Ellen is gluing tiles on the four vertical sides of a rectangular planter box. The longer side of the box is covered by six more than two times as many tiles as the shorter side.

5-99. Mr. Nowling's garden has a length that is 7 feet more than twice the width. Draw a diagram to represent this situation. Label each side of the garden, and then write an expression for the perimeter.

5-109. Use the steps of the 5-D Process to organize and solve the question below. The Lesson 5.3.2C Resource Page may help you set up your table. Be sure to show each of the "D" steps clearly in your solution process.

Laura takes very good care of her vehicles. She owns a blue van and a red truck. Although she bought them both new, she has owned the truck for 17 years longer than she has owned the van. If the sum of the ages of the vehicles is 41 years, how old is the van and how old is the truck?

Lesson 5.3.2C Resource Page

The 5-D Process

5-109a.

Describe/Draw:

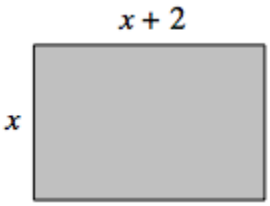
-
-
-

	Define		**Do**	**Decide**
	truck	van	truck + van	Is the sum 41 years?
Trial 1:				
Trial 2:				
Trial 3:				

Declare:

-

- **Wednesday Homework**
- **5-123.** If the total area of the rectangle below is 168 square units, how long is each side? To find out how long the x side must be, copy the diagram and table and answer the questions that follow.



- **Describe/Draw:**

	Define Side #1	Side #2	**Do** (Side one)· (Side two)	**Decide** Area = 168?
Trial 1:	10	12		
Trial 2:				

- **Declare:**

a. Describe how the lengths of the two sides are related to each other.

b. Which side of the rectangle does Side #2 represent?

c. Use the 5-D Process to complete the table. Find the lengths of the two sides of the rectangle.

- **5-124.** Evaluate each expression.

a. $0.5(5 + 13) - 4 \cdot 5$

b. $(5 + 11) - (24 - 15) \cdot (3)$

c. $6^2 + 3 \cdot 7 - 9 \div 3$

- **5-125.** Simplify the following variable expressions.

a. $2x + 5 + x - 6 + 3x$

b. $x - 8 + x - 5 + x + 1$

5-126. A radio station is giving away free t-shirts to students in local schools.

It plans to give away 40 shirts at Big Sky Middle School and 75 shirts at High Peaks High School.

Big Sky Middle School has 350 students, and 800 students attend High Peaks High School.

a. What is the probability of getting a t-shirt if you are a student at the middle school?

b. What is the probability of getting a t-shirt if you are a student at the high school?

c. Are you more likely to get a t-shirt if you are a student at the high school, or at the middle school?

- **5-127.** One student rewrote the expression $17 \cdot 102$ as $17(100 + 2)$, and then simplified to get the expression $1700 + 34$.

a. Are the three expressions equivalent? Justify your answer.

b. What property of numbers does this demonstrate?

Friday Homework

- **5-139.** If you can travel 156 miles on 4 gallons of gasoline, how far can you travel on 12 gallons? How many miles on 6 gallons? A diagram may help you with your reasoning. Show your work and explain your thinking.

- **5-140.** Use the Distributive Property to simplify the following expressions.

  a. $4(x + 2)$

  b. $-5(9 + x)$

  c. $7(x - 3)$

- **5-141.** Simplify the following expressions. (Note – the fractions appear to be elevated, but they should not. You are simply multiplying by those fractions)

  a. $-5 + 2(8 - 12)$

  b. $(-5 + 2)(8 - 12)$

  c. $-5 + 2 \cdot 8 - 12$

  d. $\frac{1}{2}(-6)(4 + 10)$

  e. $-\frac{2}{3} \cdot 6 + 15 \div (-3)$

  f. $(7 - 2)^2 - 5 \div 5$

- **5-142.** Find the lengths of the missing sides on the similar shapes below. What is the scale factor?